

# HUTCHINGS' CALIFORNIA SCENES.—METHODS OF MINING.



## SINKING A SHAFT

Is represented in the above engraving. These are sunk to ascertain if there is pay dirt upon the bed rock, or in any strata of gravel above it; or to find the best or best low in the rock upon a hill before commencing to tunnel. Sometimes all the pay dirt is lost below by the wind-laws. The shafts are frequently very deep; one at Weaverly, Trinity Co., is 625 feet in depth.

## SINKING.

To the right a company of miners are "sinking" the shaft. The upper end are throwing in the pay dirt, and the man at the lower end is tending the sluice. Several lengths of sluice boxes, or troughs with the ends out, supported by timbers, form the sluice: across the bottom, under the sluice, are riffles or false bottoms, to save the gold; a stream of water being turned down, the gold is separated from the dirt, which is washed out.

## CANALS.

The above is intended to represent a canal, by means of which the water of a river or creek, after winding among the hills for many miles, supplies the mines with a constant water. They are built at great cost, and are a great valuable convenience, for without them the mines would be comparatively useless. The time may come when the whole of the water from our mountain streams will be needed for mining and manufacturing purposes, and will be sold at a price within the reach of all.

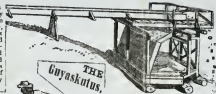


## The Hydraulic Telegraph.

The above represents the manner of constructing the "Hydraulic Telegraph," as it is named. A small flume is placed upon poles or high timbers, through which the water is conveyed from the canal or ditch to a barrel or square wooden funnel at the end, to which is attached the hose. These Telegraphs are generally from 50 to 120 feet above the pipe of iron which the water returns, thus creating the required force for washing down banks of earth into the sluice.

## Hydraulic Washing.

The above shows represents a company of miners washing down the hill by a hydraulic process. The water from above is led confined in a long pipe, is played through a pipe upon the bank of mud and gravel with great force, by this the pipe over it, quantities of earth are washed down, and sent through a long sluice, the dirt is there saved. Sometimes where the gold is very fine, the hydraulic process is of great value to the miner, saving a large sum to pay the work of water.



THE GUYANOLUS.

The above is an illustration of a gold-washing machine, invented by Mr. J. M. Guyan, of Eureka, by which a man or man in particular, who has the first part of the machine, can wash a large quantity of earth over the whole of the dirt, and the water goes through a small hole in the machine, which is a small quantity of water, and being washed out, the gold is saved.

**TOMING.**—The above represents three men working with a Tom; two are vigorously picking down, and shoveling the dirt into the upper part of the Tom, and the other is moving it about with a hoe or shovel; to wash it and throw out the larger rocks or stidlings. The gold, dirt and water passes by a sieve or iron at the lower end into a rifle box underneath, where the gold is saved.



## GROUND SLUICING.

This illustrates one of the many methods of ground sluicing. A trench is first dug down the hillside, into which a small stream of water is turned; miners then stand across or in the trench, and with their pipe a boson the trench is a dirt, while the force of the water carries it into a sluice below. Sometimes a stream of water is made to run by the side of a bank, and by undermining or picking down the bank, it falls into the water, by which it is removed, and the pay dirt is afterwards carefully washed.

## TURNING THE RIVER.

This view represents the building of a dam across the river, to turn it into a flume. From ten to twenty men form themselves into a joint stock company, for the purpose of draining and working the bed of the river. Sometimes several companies will unite, and by their enterprise, build a flume several miles in length, into which the whole stream is turned. Weeds are placed in the flume to pump out the remaining water, or a crane or crane or derrick is used to pump out the remaining water, and the dirt is washed in a sluice, ton or cradle. The "Sail or Chain" on Feather River, cost over \$100,000, and employed 100 hundred men daily.



## PANNING OUT.

The above represents the prime method of panning. A pan full of dirt is set into the water, and by shaking it forward and back, the dirt is washed out, and the gold remains at the bottom of the pan, in the sand. The method is well used by every miner in wash on the product of the day's labor, while the Chinese or Mexican use the pan or bowl exclusively.



## TUNNELING.

The above shows a man using a tunneling machine to dig through earth. The machine is a small, portable engine, which is pushed or pulled by hand, and is used to dig through the earth, and to bring out the dirt, which is then washed in a sluice, ton or cradle. The "Sail or Chain" on Feather River, cost over \$100,000, and employed 100 hundred men daily.



## ROCKING THE CRADLE.

The earth to be washed is carried in buckets to the cradle, and is then poured into the cradle. The cradle is rocked from side to side, the earth is washed out, and the gold remains at the bottom. The method is well used by every miner in wash on the product of the day's labor, while the Chinese or Mexican use the pan or bowl exclusively.

## NAMES OF MINING LOCALITIES

- Salt Pork Ridge,
- Polatase Hill,
- Mugawamp,
- Blue Canyon,
- Devils Basin,
- Lost Chance,
- Red Cap Bar,
- Bunkumville,
- Whiskey Slide,
- One Horse Town,
- Greenhorn Creek,
- Humbung Gulch,
- Sucker Flat,
- Red dog Diggings
- Small Gulch,
- Shirt Tail Bend,
- Crack Creek,
- Poppet Diggings,
- Wolf Bar,
- Hell's Delight,
- Deadwood,
- Buckeye Flat,
- Oak Run,
- Gass Hill,
- Squaw Creek,
- Pepper Creek,
- Brandy Creek

## Don Pedro's Bar,

- Merman Ravine,
- Rough and Ready
- Blanket Creek,
- Angels' Camp,
- Lovers' Hollow,
- Mosquito Canyon
- Bottle Hill,
- Pitchfork,
- Pot Luck City,
- Bloody Run,
- Pepper Rock,
- Loose Village,
- Hang Town,
- Ground Hog's Glory,
- Rareed Breccias Bar
- Rum Blomson Plain,
- Gristly Bar Ravine,
- Big Nose Settlement,
- Mill Mule Canyon.

11-11-11

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